

# Work Order ID 76358

**\*76358\***

Page 1

November-09-11 2:33:27 PM

Item ID: D3017-041 Accept **\*N900040100\*** Setup Start **\*NS1\***  
 Revision ID: Stop **\*NS2\***  
 Item Name: Back Frame Assembly  
 Start Date: 09/11/2011 Start Qty: 1.00 **\*1\*** Cust Item ID:  
 Required Date: 25/11/2011 Req'd Qty: 1.00 **\*1\*** Customer:  
 Reference:

Approvals: Process Plan: M.C.J Date: 11/11/09 Tooling: \_\_\_\_\_ Date: \_\_\_\_\_ Run Start **\*NR1\***  
 QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_ Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
D3017	Rev B

100 Weld per dwg A/R 4130 rod Batch: MN8875 0.00  
 Large Fab

**\*100\***

Large Fab Memo 0.00  
 Large Fab

1-Cut D3017-1, D3017-3 and D3017-5 tubes as per Dwg D3017 As 11-11-26 EZ 11-11-30 (X1)

2-Bend D3017-1 and D3017-3 tube as per dwg D3017 (DT8598)

3-Drill holes in D3017-5 Using DT8622

4-Deburr

5-Assemble and weld as per Dwg D3017 using Welding Jig DT8598

6-Drill holes in back frame using DT8621

110 QC9- Inspect visual per QSI004- Fusion Welds 0.00

**\*110\***

QC Memo 0.00  
 Quality Control

As 11-12-01

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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**NOTE:** Date & initial all entries

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Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120	QC5- Inspect part completeness to step on W/O	0.00				<u>W</u>	<u>11</u>	<u>12</u>	<u>01</u> ①
<b>*120*</b>									
QC	Memo	0.00							
Quality Control									
130	Grey Sandtex(Ref:4.3.5.6) per QSI005 4.3	0.00							
<b>*130*</b>									
Powdercoat	Memo	0.00							
Powder Coating	START TIME: <u>10-45</u>								
	OVEN TEMPERATURE: <u>320</u>								
	FINISH TIME: <u>11-15</u>								
140	QC3- Inspect Part Finish	0.00							
<b>*140*</b>									
QC	Memo	0.00							
Quality Control									

*IXC M/L 11/12/01*

*1ASSY & J 11/12/01*

W/O:		WORK ORDER CHANGES					
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Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_ Run Start **\*NR1\***  
QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_ Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
150	Identify as per dwg & Stock Location: <u>CA</u>	0.00							
<b>*150*</b>									
Packaging	Memo	0.00							
Packaging									
160	QC21- Final Inspection - Work Order Release	0.00							
<b>*160*</b>									
QC	Memo	0.00							
Quality Control									

*Handwritten notes:*  
11/12/02  
11-12-02

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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# Picklist Print

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Page 1

Work Order ID: 76358

**\*76358\***

Parent Item: D3017-041

**\*D3017-041\***

Parent Item Name: Back Frame Assembly

Start Date: 09/11/2011

Required Date: 25/11/2011

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP A01.09.19New issue EC  
IPP RevB: as per revB DD verified by:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

M4130NT0.750W.083

Purchased

No

100

f

53.4370

2.458

2.587368

**\*M4130NT0 750W 083\***

\*\*

Ac 11.11.26

4130 RD Tube .750 x.083W

Location

Loc Qty

Loc Code

MAT033

53.437

117579

29.52

2.5873

117973

23.917

M4130NT0.750W.049

Purchased

No

100

f

105.5500

11.125

11.71053

**\*M4130NT0 750W 049\***

\*\*

Ac 11.11.26

4130 RD Tube .750 x.049W

Location

Loc Qty

Loc Code

MAT033

105.55

117973

33.55

11.71053

118772

72

D3017-11

Manufactured

No

100

Each

11.0000

2

2

**\*D3017-11\***

\*\*

Ac 11.11.30

cap

Location

Loc Qty

Loc Code

WA

11

69074

11

76851

x 2

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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**NOTE:** Date & initial all entries



# Picklist Print

November-09-11 2:33:31 PM

Work Order ID: 76358

**\*76358\***

Parent Item: D3017-041

**\*D3017-041\***

Parent Item Name: Back Frame Assembly

Start Date: 09/11/2011

Required Date: 25/11/2011

Start Qty: 1.00

Required Qty: 1.00

D3017-7

Manufactured No

100

Each

25.0000

3

3

**\*D3017-7\***

Lug

\*\*

*EL*

*11-11-30.*

Location

Loc Qty

Loc Code

WA

9

69166

1

70905

8

WA019

1

*52915*

1

WA030

15

*70871*

15

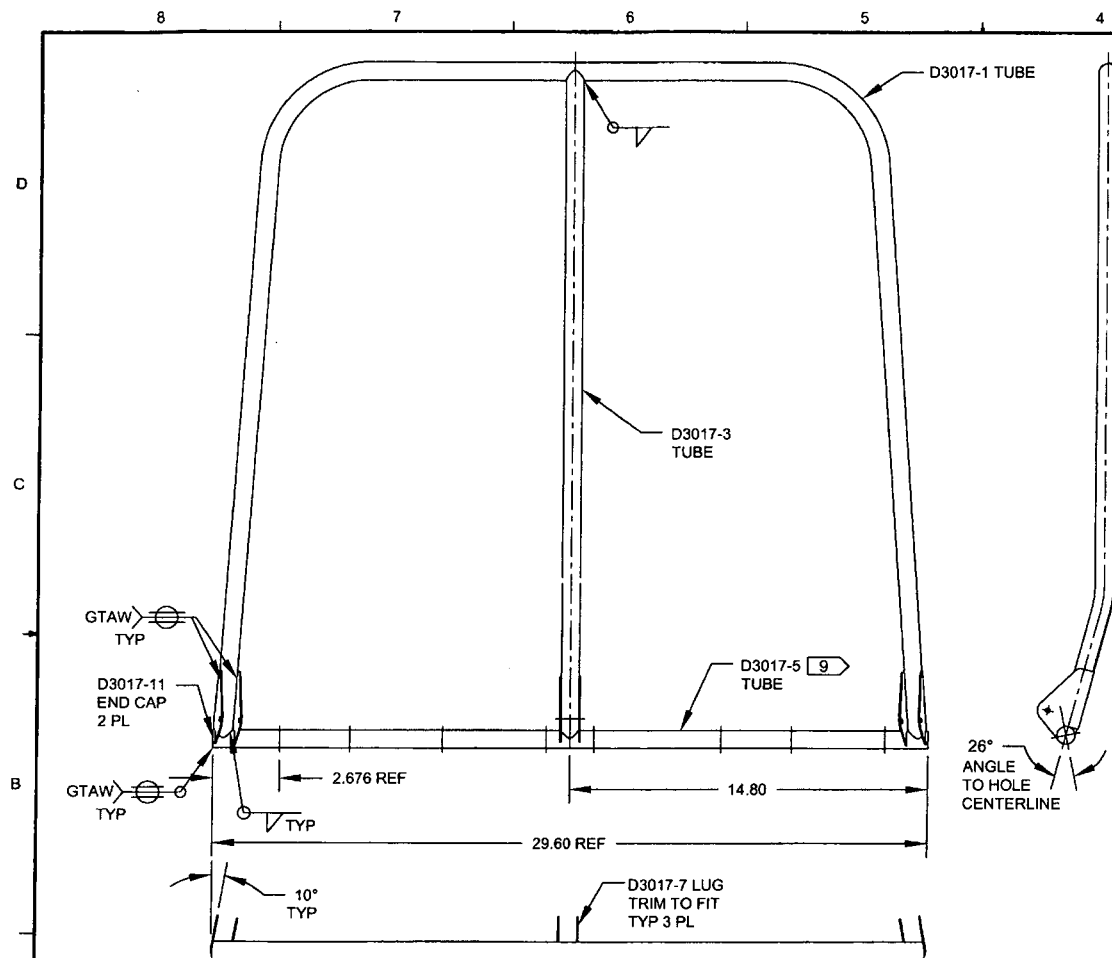
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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**NOTE:** Date & initial all entries



ITEM No.	QTY	PART NUMBER	DESCRIPTION
1	X	D3017-041	BACK FRAME ASSEMBLY
2	1	D3017-1	TUBE
3	1	D3017-3	TUBE
4	1	D3017-5	TUBE
5	3	D3017-7	LUG
6	2	D3017-11	END CAP

SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. 76358 M.C.J  
11/11/05

RELEASED  
R 2010-02-02  
wp

### D3017-041 BACK FRAME ASSEMBLY

#### NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: POWDER COAT GREY SANDTEX (4.3.5.6) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3017-041" USING FINE POINT PERMANENT INK MARKER
- 7) WEIGHT: 4.50 lbs
- 8) WELD PER DART QSI 004
- 9) ROTATE SO THAT PILOT HOLES ARE ANGLED AS SHOWN IN END VIEW.

B	REFORMAT DWG. -5 TUBE WALL THKNS REVD (A8-3) SHEET 3 & 4 ADDED TO CLARIFY DRAWING. RADIUS CHANGED FROM R4.00 TO R3.75 (B4-2, B2-2). HOLE SIZE CHANGED FROM Ø0.191 TO Ø0.257 (C6-3, C3-3)	JPH	10.01.13
A	NEW ISSUE	CP	01.05.18
REV.	DESCRIPTION	BY	DATE
DESIGN			
DRAWN			
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	10.01.13		

**DART AEROSPACE LTD**  
HAWKESBURY, ONTARIO, CANADA  
DRAWING NO. D3017  
REV. B  
SHEET 1 OF 4  
TITLE BACK FRAME ASSEMBLY  
SCALE NTS

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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

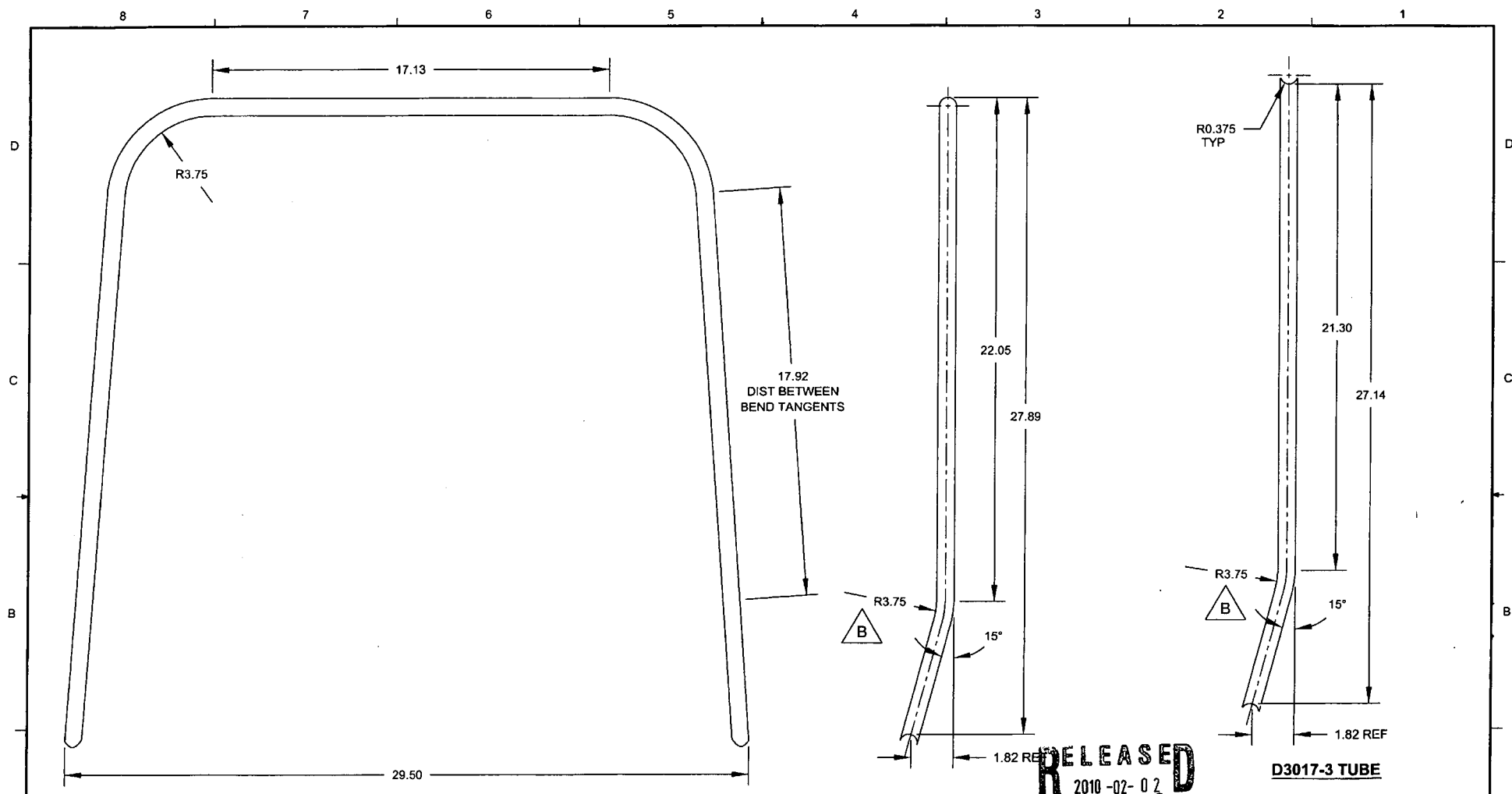
Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

76358



- NOTES:**
- 1) MATERIAL: AISI 4130N TUBE, Ø0.75 DIA x 0.049 WALL (M4130N-T0750W049)
  - 2) FINISH: NONE
  - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
  - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
  - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
  - 6) IDENTIFICATION: NONE
  - 7) WEIGHT: D3017-1: 2.38 lbs; D3017-3: 0.84 lbs.

DESIGN		<b>DART AEROSPACE LTD</b>	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO. D3017	REV. B
MFG. APPR.		SHEET 2 OF 4	
APPROVED		TITLE	SCALE
DE APPR.		BACK FRAME ASSEMBLY	NTS
DATE	10.01.13	<small>COPYRIGHT © 2001 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small>	

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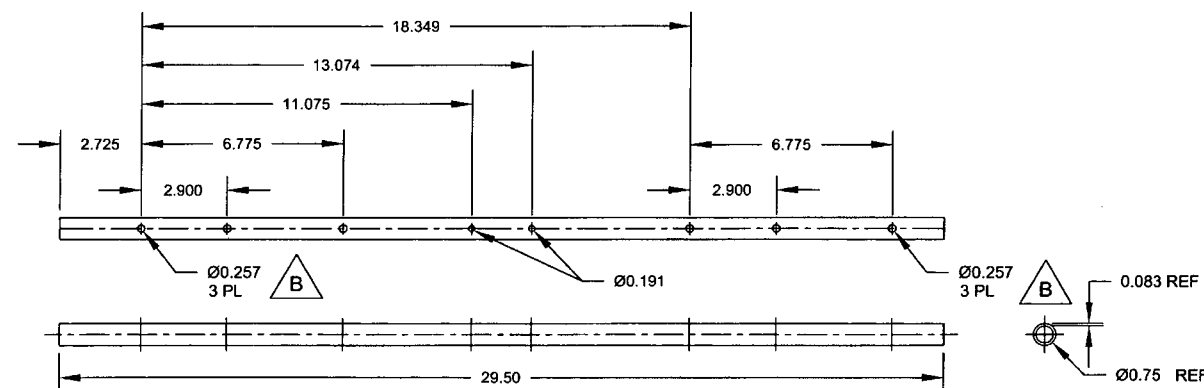
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**NOTE:** Date & initial all entries

76358



**D3017-5 TUBE**

**RELEASED**  
2010-02-02  
AMP

- NOTES:**
- 1) MATERIAL: AISI 4130N TUBE,  $\varnothing 0.75$  DIA x 0.083 WALL (M4130N-T0750W083)
  - 2) FINISH: NONE
  - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
  - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
  - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
  - 6) IDENTIFICATION: NONE
  - 7) WEIGHT: 0.89 lbs



DESIGN		<b>DART AEROSPACE LTD</b>	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. B
MFG. APPR.		D3017	SHEET 3 OF 4
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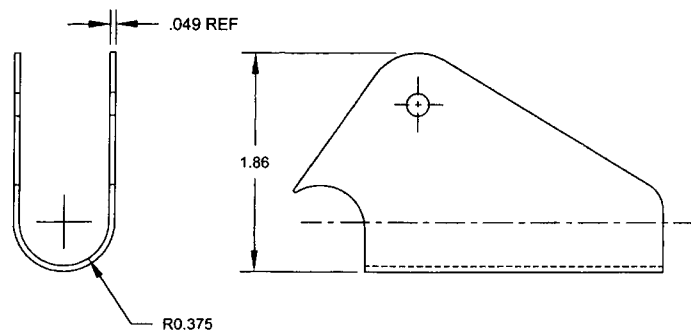
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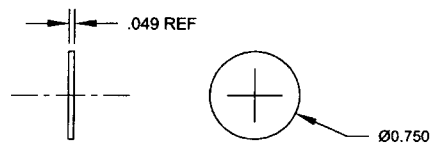
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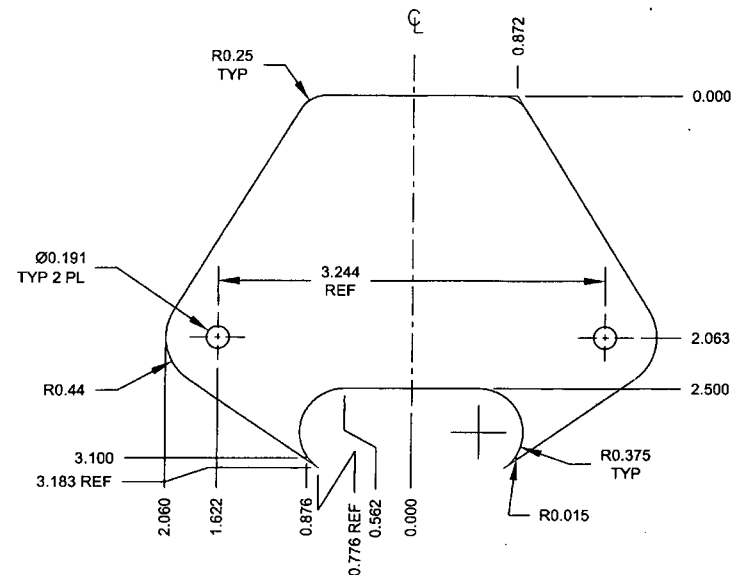
**D3017-7 LUG**  
BENDING DETAIL  
MAKE FROM D3017-7F



**D3017-11 END CAP**

**NOTES:**

- 1) MATERIAL: AISI 4130N SHEET, 18 GAUGE (M4130N-S049)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: -7: 0.12 lbs; -11: 0.01 lbs.



**D3017-7F FLAT PATTERN**

PART IS SYMMETRIC  
ABOUT CENTERLINE

**RELEASED**  
2010-02-02

DESIGN		<b>DART AEROSPACE LTD</b>	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. B
MFG. APPR.		D3017	SHEET 4 OF 4
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8 7 6 5 4 3 2 1

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